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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
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EXAMINER

KIM, KEVIN

ART UNIT PAPER NUMBER

2634

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,574

Applicant(s)

TEAGUE ET AL.

Examiner

Kevin Y Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12,13,15,17-26,28,29,31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-26,28,29,31 and 32 is/are allowed.
- 6) ☒ Claim(s) 12,13,15,17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. It is appreciated that Applicant has amended claims to overcome rejections as set forth in the previous Office action. Upon a review of the claims, though, claims 12,13,15,16-19 indicated allowable are found to have been anticipated as set forth below. It is regretted that premature indication of allowable subject matter might have caused any conveniences for Applicant. This Office action is thus non-final.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 15,17-19 are rejected under 35 U.S.C. 112, first paragraph, because they are each a single means claim which is held non-enabling as it attempts to cover every conceivable means and the specification discloses at most only those means known to the inventor. See MPEP 2164.08(a).

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 12, 13,15,17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Basso (US 6,345,078 previously cited).

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Consider claim 12. Referring to Fig. 1, Basso describes a method of time tracking a plurality of fingers in a Rake (see col. 2, lines 15-19) comprising:

restricting each finger (12a for instance) from tracking outside motion limits . See col. 6, lines 11-15,

determining the motion limits for a finger in accordance with the position of one or more adjacent fingers. See col.6, lines 64 ~ col., line 5.

Regarding the last limitation calling for “no advance limit is set for a finger with no adjacent finger ahead in time, ” since the minimum offset d_{\min} is set only between adjacent fingers (12a and 12b for instance), it is presumed that the finger with no adjacent finger ahead in time, i.e., the finger that tracks the earliest-arriving signal, is not assigned any offset in the “advance” direction where there is no adjacent finger.

Consider claim 13, the identical limitation of claim 12 have been addressed above. Regarding the last limitation calling for “no retard limit is set for a finger with no adjacent finger behind ahead in time, ” since the minimum offset d_{\min} is set only between adjacent fingers (12a and 12b for instance), it is presumed that the finger with no adjacent finger behind ahead in time, i.e., the finger that tracks the latest- arriving signal, is not assigned any offset in the “retard” direction, , where there is no adjacent finger.

Regarding claim 15 calling for regenerating motion limits periodically, Basso discloses that offsets are initially assigned to fingers and later adjusted, implying a periodic adjustment of the offsets. See col. 2, lines 15-19.

Regarding claims 17 and 18 calling for regenerating motion limits “when a timing tracking command is issued to the finger,” Basso discloses that offsets are initially assigned to

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fingers and later adjusted, See col. 2, lines 15-19. And when offsets are later adjusted, a control signal, i.e., "a time-tracking command" will be issued from the processing circuitry (18) to control the tracking loop of the finger for regeneration of the offsets.

Allowable Subject Matter

5. Claims 20-26,28 ,29,31 and 32 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 703-305-4082. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kvk



**CHIEH M. FAN
PRIMARY EXAMINER**